## Commonwealth of Massachusetts Executive Office of Environmental Affairs MEPA Office

## **Environmental Notification Form**

For Office Use	Only
Executive Office of Enviro	mmantal Affaina
Enviro	nmentat Affairs

EOEA No.: 13/63 MEPA AnalystAnne Canaday Phone: 617-626-1035

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act. 301 CMR 11.00.

Project Name 146 at 18 0				
Project Name: Windmill Cove South - Mainte	enance Dredging & Habitat Enhancement			
Street: Bridge Street, Little Island - Osterville				
Municipality: Barnstable (Osterville)				
Universal Tranverse Mercator Coordinates:	Watershed: Nantucket Sound Latitude: 41°37'17"			
382675E, 4607400N	Longitude: 70°24'29"			
Estimated commencement date: Nov. 2004	Estimated completion date: June 2005			
Approximate cost: \$500,000	Status of project design, 400			
Proponent: Three Bays Preservation, Inc.	Status of project design: 700 %complete			
Street: 864 Main Street, P.O. Box 215				
Municipality: Barnstable (Osterville)	State: MA Zip Code: 02655			
Name of Contact Person From Whom Copies	of this ENF May Be Obtained:			
reter Sullivan	and the obtained.			
Firm/Agency: Sullivan Engineering, Inc.	Street: 7 Parker Road / P.O. Box 659			
Municipality: Barnstable (Osterville)	State: MA Zip Code: 02655			
Phone: 508-428-3344 Fax: 508	8-428-3115 E-mail: psullpe@aol.com			
Door this project				
Does this project meet or exceed a mandatory El				
Has this project been filed with MEPA before?	∕es ⊠No			
	∕es (EOEA No) ⊠No			
Has any project on this site been filed with MEPA	before?			
	∕es (EOEA No) ⊠No			
Is this an Expanded ENF (see 301 CMR 11.05(7)) reque				
a Single EIR? (see 301 CMR 11.06(8))	∐Yes ⊠No			
a Special Review Procedure? (see 301 CMR 11.09) a Waiver of mandatory EIR? (see 301 CMR 11.11)	∐Yes ⊠No			
a Phase I Waiver? (see 301 CMR 11.11)	∐Yes ⊠No □Yes ⊠No			
Identify any financial assistance or land transfer fithe agency name and the amount of funding or la	nd area (in acres): M.A.			
or la	nd died (in acres). N.A.			
Are you requesting coordinated review with any o	ther federal, state, regional, or local agency?			
Yes(Specify	) ⊠No			
List Local or Federal Permits and Approvals: Order of Conditions from the Town of Barnstable Conservation Commission (SE3-4039), 401 Water Quality Certification (Application Pending),				
Original Five and Sermit (Application Pending). US Army Corps of Engineers Permit				
(Application Pending)	on a composition of the contract of the contra			

Revised 10/99

Comment period is limited. For information call 617-626-1020

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):				
☐ Land ☐ Water ☐ Energy ☐ ACEC	Rare Spec Wastewate Air Regulation	er 🗍	Transporta Solid & Ha	zardous Waste k Archaeological
Summary of Project Size	Existing	Change	Total	State Permits &
& Environmental Impacts				Approvals
	LAND			Order of Conditions
Total site acreage	10±			(SE3-4039 Approved) ☐ Superseding Order of
New acres of land altered		0		Conditions
Acres of impervious area	0	0	0	Chapter 91 License
Square feet of new bordering vegetated wetlands alteration		0		(Application Pending)
Square feet of new other wetland alteration		169,500±		
Acres of new non-water dependent use of tidelands or waterways		0		
STRI	JCTURES			Approval
Gross square footage	0	0	0	DEP or MWRA
Number of housing units	0	0	0	Sewer Connection/ Extension Permit
Maximum height (in feet)	0	0	0	Other Permits
TRANS	PORTATION			(including Legislative Approvals) — Specify:
Vehicle trips per day	0	0	0	Approvais) — Specify:
Parking spaces	0	0	0	Army Corps of Eng. Permit (Application Pending)
WATER/V	VASTEWATER	}		
Gallons/day (GPD) of water use	0	0	0	
GPD water withdrawal	0	0	0	
GPD wastewater generation/ treatment	0	0	0	
Length of water/sewer mains (in miles)	0	0	0	

CONSERVATION LAND: Will the project involve the conversion natural resources to any purpose not in accordance with Article 97  [Yes (Specify)	of public parkland or other Article 97 public 7? ⊠No
- 2 -	

· prompto

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?
□Yes (Specify) ⊠No
RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?
HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?
☐Yes (Specify) ⊠No
If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?
☐Yes (Specify) ☐No
AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?
□Yes (Specify) ⊠No
<b>PROJECT DESCRIPTION:</b> The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (You may attach one additional page, if necessary.)
The proposed project is to take place in Windmill Cove South, which lies south of the causeway
between Little Island and Osterville Grand Island, also known as Oyster Harbors. Located in the
North West corner of West Bay in the village of Osterville, in the town of Barretable, these waters

Osterville, in the town of Barnstable, these waters are a portion of what is commonly referred to as the Three Bays System.

Within the Cove, which is fringed with salt marsh, the land under ocean consists of soft silt containing no eelgrass or shellfish. Continuing outside of the Cove into West Bay the soft silt changes to sand, and although portions of West Bay are considered to be significant shellfish habitat, the area around the project site is not considered to be, and there is no eelgrass. Extensive testing was performed on bottom samples taken in and around the project site. Due to it's size, a report of the Analytical Results was not included in this ENF, but is available on request.

The proposed project is to maintenance dredge a channel in Windmill Cove South that extends out to West Bay, and to use the dredge spoil to create salt marsh and shellfish habitat within the Cove. The channel was previously approved under the Division of Waterways and Public Lands Permit No. 720, and dredged in the late 1920's. At that time the channel was dredged to an elevation of -6, and the spoil was disposed of along the edge of the Cove where salt marsh has since flourished.

At this time we are proposing to dredge the channel to a depth of -4, with a 1 foot over dredge allowance. By reducing the dredge depth to -4 we are able to reduce the overall length of the

dredging by 8%, and the volume of the dredge spoil by 50%.

The channel will be 40 feet wide with side slopes extending at a rate of 3 to 1, and 1,880 feet long with a total footprint of approximately 2.4 acres. The total estimated dredge spoil is 7,330 cubic yards with approximately 5,150 cubic yards of clean compatible sand and 2,180 cubic yards of soft silt.

The sandy material located just outside of the Cove will be dredged by clamshell onto a spoil barge. Once fully loaded the spoil barge will be brought into the Cove, which will be lined with a siltation barrier. Some of the sandy material will then be used to create a 175 foot long containment dike approximately 160 feet seaward of the edge of the marsh located in the northern portion of the Cove. The remainder of the sandy material will be deposited along the eastern edge of the cove to create approximately one acre of shellfish habitat, which will be seeded with soft shell clams. It is the applicants intent to work in partnership with the Town of Barnstable Marine & Environmental Affairs Division, and Shellfish Advisory Committee for the shellfish habitat portion of the project.

The silty material located inside of the Cove will also be dredged by clamshell onto a spoil barge. This material will then be placed within the containment dike, and planted with the appropriate species of salt marsh grasses thus creating approximately one-half acre of salt marsh habitat.

This maintenance dredging project will first, and foremost improve navigation within the Cove. In addition the dredging of the channel can only improve the flushing rates within the Cove, thus improving the water quality. Also, by utilizing the dredge spoil for the creation of salt marsh and shellfish habitat in lieu of disposing of it at an upland site, or a landfill, the project results in the enhancement of both resources, and in turn can only have positive impacts to the overall water quality. Lastly, by increasing the salt marsh there will be an overall improvement to the area's ability to prevent storm damage, and control flood waters.

At this time the project has been issued an Order of Conditions by the Town of Barnstable Conservation Commission for the proposed dredging. The enhancement of the salt marsh and shellfish habitat has also been approved as an Amendment to the Order of Conditions. The project will also require a 401 Water Quality Certification, a Chapter 91 Waterways Permit, and an Army Corps of Engineers Permit.